R307. Environmental Quality, Air Quality.

R307-306. PM10 Nonattainment and Maintenance Areas: Abrasive Blasting.

R307-306-1. Purpose.

This rule establishes requirements that apply to abrasive blasting operations in PM10 nonattainment and maintenance areas.

R307-306-2. Definitions.

The following additional definitions apply to R307-306.

"Abrasive Blasting" means the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

"Abrasive Blasting Equipment" means any equipment used in abrasive blasting operations.

"Abrasives" means any material used in abrasive blasting operations including but not limited to sand, slag, steel shot, garnet or walnut shells.

"Confined Blasting" means any abrasive blasting conducted in an enclosure that significantly restricts air contaminants from being emitted to the ambient atmosphere, including but not limited to shrouds, tanks, drydocks, buildings and structures.

"Hydroblasting" means any abrasive blasting using high pressure liquid as the propelling force.

"Multiple Nozzles" means a group of two or more nozzles used for abrasive cleaning of the same surface in such close proximity that their separate plumes are indistinguishable.

"Unconfined Blasting" means any abrasive blasting that is not confined blasting as defined above.

"Wet Abrasive Blasting" means any abrasive blasting using compressed air as the propelling force and sufficient water to minimize the plume.

R307-306-3. Applicability.

R307-306 applies to any person who operates abrasive blasting equipment in a PM10 nonattainment or maintenance area, or to sources listed in Section IX, Part H of the state implementation plan.

R307-306-4. Visible Emission Standard.

- (1) Except as provided in (2) below, visible emissions from abrasive blasting operations shall not exceed 20% opacity except for an aggregate period of three minutes in any one hour.
- (2) If the abrasive blasting operation complies with the performance standards in R307-306-6, visible emissions from the operation shall not exceed 40% opacity, except for an aggregate period of 3 minutes in any one hour.

R307-306-5. Visible Emission Evaluation Techniques.

(1) Visible emissions shall be measured using EPA Method 9. Visible emissions from intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a six minute period shall not

 apply.

- (2) Visible emissions from unconfined blasting shall be measured at the densest point of the emission after a major portion of the spent abrasive has fallen out at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle.
- (3) An unconfined blasting operation that uses multiple nozzles shall be considered a single source unless it can be demonstrated by the owner or operator that each nozzle, measured separately, meets the visible emission standards in R307-306-4.
- (4) Emissions from confined blasting shall be measured at the densest point after the air contaminant leaves the enclosure.

R307-306-6. Performance Standards.

- (1) To satisfy the requirements of R307-306-4(2), the abrasive blasting operation shall use at least one of the following performance standards:
 - (a) confined blasting;
 - (b) wet abrasive blasting;
 - (c) hydroblasting; or
- (d) unconfined blasting using abrasives as defined in (2) below.
 - (2) Abrasives.
- (a) Abrasives used for dry unconfined blasting referenced in (1) above shall comply with the following performance standards:
- (i) Before blasting, the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve.
- (ii) After blasting the abrasive shall not contain more than 1.8% by weight material 5 microns or smaller.
- (b) Abrasives reused for dry unconfined blasting are exempt from (a)(ii) above, but must conform with (a)(i) above.
- (3) Abrasive Certification. Sources using the performance standard of (1)(d) above to meet the requirements of R307-306-4(2) must demonstrate they have obtained abrasives from a supplier who has certified (submitted test results) to the executive secretary at least annually that such abrasives meet the requirements of (2) above.

R307-306-7. Compliance Schedule.

The provisions of R307-306 shall apply in any new PM10 nonattainment area 180 days after the area is officially designated a nonattainment area for PM10 by the Environmental Protection Agency. Provisions of R307-206 shall continue to apply to the owner or operator of a source during this transition period.

Key: air pollution, abrasive blasting, PM10 2005

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